REMARKS

As noted in the previous response to the Examiner's inventorship query, all claimed subject matter was commonly owned at the time the inventions claimed therein were made. 37 C.F.R. § 1.56.

Rejection Under 35 U.S.C. 103(a)

Claims 1 and 3-15 stand finally rejected under 35 U.S.C. 103(a) as unpatentable over Maguire in view of Dawson. Applicants respectfully traverse this rejection as unsupportable.

The remarks made in the previous Amendment and Response of September 18, 2003 are considered pertinent in response to the Final Rejection and are repeated here in their entirety.

In remanding the present application to the Examiner, the Board of Patent Appeals and Interferences ("Board") directed the Examiner to:

> ...determine whether it would have been obvious to one having ordinary skill in the art to replace the round knobs of Maguire with pins in holes, in light of the apparent recognition by Maguire and Dawson of pins and knobs as alternatives, taking into account, of course, that Maguire indicates that knobs eliminate the need for using pins.

(Decision on Appeal, p. 7).

The Board further stated in a footnote that "[t]he statement by Maguire concerning eliminating the need for pins should be evaluated to determine whether it is a teaching away." The Board provided further guidance by citing from *In re Gurley*, 27 F.3d 551, 553, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994) as follows:

> A reference may be said to teach away when a person of ordinary skill, upon [examining] the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.

(Decision on Appeal, fn. 2, p. 7)

Judge Newman observed in *Gurley*:

> The nature of the resin is the only significant difference from the prior art circuit material. ... The facts in *Gurley's* record are that this use of epoxy was known, the structure of these circuit boards was known, and epoxy had been used for *Gurley's* purpose.

Id., 1131, 1132 (emphasis supplied).

By contrast, the presently claimed invention represents many 'significant differences' from Dawson and Maguire. The Amendment and Response of September 18, 2003 described the many significant differences of the present claims from Maguire. In regard to Dawson, note that present claim 1 calls for "an opening extending through the neck portion from the top face to the bottom face." Claim 8 calls for "a continuous cavity being defined by each opening of vertically aligned blocks in the upper course of the blocks communicating with side voids of vertically adjacent blocks in the lower course." Dawson is specifically directed to constructing a plantable wall and his blocks 10 have a cavity 30 extending only to a bottom wall 32, so that the cavity 30 accommodates plants or vegetation (FIGS. 1-11; col. 5, line 50 – col. 6, line 25).

There are many significant differences between Dawson and Maguire that establish that the present 35 U.S.C. 103 rejection is untenable because (1) there is no suggestion to combine the Maguire and Dawson teachings and (2) Maguire and Dawson teach away from each other and from the presently claimed invention.

A. Differences between Maguire's Knob-and-Groove and Dawson's Pin-in-Hole

In FIG. 1 of Maguire, two rows of spaced upwardly extending knobs 32 are on the top surface 22 of block 10, three knobs 32 are in the row closer to the front surface 26, and two knobs 32 are in the row closer to the back surface (col. 2, line 40 – col. 3, lines 17). The Maguire FIG. 1 block has a minimum of five knobs 32 of different sizes. According to Dawson, the pin-in-hole interlock includes at least

two pins 44, at least two pin holes 36, 38 and at least two pin-receiving pockets 40 for receiving pins 44 from adjacent blocks in a different level (col. 4, lines 30-37).

The Maguire knobs 32 are of different sizes and shapes, of circular or preferably oval configuration, and may be larger at their base for a tight, wedge-like fit in the grooves 30 (FIGS. 1 and 3-5; col. 3, lines 5-17; col. 3, line 49 – col. 4, line 11; col. 4, lines 52-57). The Dawson pins 44 all have a single uniform cylindrical cross-section (FIG. 1; col. 6, lines 49-63). Dawson's pin receiving pockets 40 are much larger than the pins 44 for an intentionally loose fit, allowing blocks in succeeding rows to slide horizontally relative to each other (FIGS. 1-3, 5-8, 10a and 11; col. 6, lines 40-63; col. 7, lines 57-58).

Maguire's knobs 32 are formed in one piece with block 10 of the same block material (FIGS. 1, 3-5; col. 3, lines 29-36). Dawson's pins 44 are separate elements and of a different material than the block (FIG. 1; col. 6, lines 49-63).

FIG. 2 of Maguire shows three parallel spaced grooves 30 extending between vertical sides of the block 10. Each groove 30 interfits with more than one knob 32. When the knobs 32 interfit with the grooves 30, one groove 30 is always vacant. Maguire, FIG. 6; col. 2, line 63 – col. 3, line 17. Dawson's holes 36, 38 and pin receiving pockets 40 are positioned discretely and do not extend across the block surface. The pins 44 of Dawson have a one-to-one relationship with their respective holes 36, 38 and pin receiving pockets 40. None of Dawson's pin receiving pockets 40 is vacant in the constructed wall. Dawson, FIGS. 1-3, 5-9a, 10a and 11; col. 6, line 40 – col. 7, line 15.

Maguire's grooves 30 extend into the block only to a depth to accommodate the height of the knobs 32 and do not extend through the body of block 10 (FIGS. 2, 3, 6; col. 2, line 63 – col. 3, line 17). Dawson's pin receiving pockets 40 extend from the block top surface 12 (col. 6, lines 40-48) through to the block bottom surface (col. 6, line 49-col. 7, line 4).

Maguire's grooves 30 are longitudinally straight and parallel to each other. A plurality of Maguire's knobs 32 fit into each groove 30. Maguire, FIGS. 1-3 and 6; col. 3, lines 5-17. Dawson's pin-receiving pockets 40 are generally oval or kidney-shaped. Each of Dawson's pins 44 can fit in only a single pin-receiving pocket 40. Dawson, FIGS. 1-3, 5-9a, 10a and 11; col. 6, line 40 – col. 7, line 15.

Maguire always has one more groove 30 than the number of rows of knobs 32 (col. 3, lines 14-17). Dawson has only one pin-receiving pocket 40 per pin 44 (FIGS. 1-3, 5-9a, 10a and 11; col. 6, line 40 – col. 7, line 15).

Maguire teaches that a pin-in-hole interlock is inferior to his very specific knob-and-groove interlock (col. 1, lines 4-67; col. 4, lines 20-31, 45-51). Dawson teaches that pin-in-hole interlock is merely an alternative to his type of knobs; neither is preferred (col. 7, lines 16-37). Further, the knobs of Dawson are radically different in structure and function from the particular Maguire knob-and-groove interlock, as just explained.

Maguire and Dawson taken together do not support the broad proposition that knobs-and-grooves are equivalent to pins-in-holes in this art area.

B. Differences Between Maguire's Knob-and-Groove and Dawson's Knobs

In making the final rejection the Examiner noted:

> Applicant fails to address the teachings of Dawson that clearly show embodiments having either knobs *and grooves* or pins and holes. In view of Dawson's teaching, it is apparent that knobs *and grooves* are equivalent structure to pins and holes and can be used interchangeably. (Emphasis supplied.)

(Final Rejection, page 4.)

The Examiner is mistaken. Dawson never teaches or suggests "grooves" to interfit with his knobs 46. In Dawson, FIGS. 9a and 9b, two rectangular knobs 46 abut vertical surfaces 48. In Dawson, FIG. 11, two rectangular knobs 46 fit

against inside corners on vertical surfaces 26. Dawson shows notches 42 on either side of plant receiving cavity 30, but they are to "accommodate an irrigation pipe or hose so that the vegetation in plant receiving cavities 30 may be watered" (col. 5, line 66 – col. 6, line 2). These notches 42 are not constructed or positioned to interfit with the knobs 46 of the blocks of FIGS. 9a and 9b or of FIG. 11.

The Maguire knobs-and-grooves are not equivalent to the Dawson knobs-and-vertical-surfaces. The structure of the Maguire knobs-and-grooves is described in detail above. Maguire extensively discusses the versatility of the knobs-and-grooves with many variations. The Maguire knobs-and-grooves can engage so that the block front faces align vertically, or incline back (col. 2, lines 11-19; col. 3, lines 1-4, 11-13; col. 3, line 59 – col. 4, line 6). The Maguire knobs-and-grooves can engage to form a convex or concave curved wall (col. 3, lines 49-55) or a circular wall (col. 4, lines 7-11). Dawson describes only two alternative knobs (FIGS. 9a and 9b and FIG. 11) that are completely different from Maguire in structure and function. Dawson does not describe versatility or variation in structure or function for his knobs. The Dawson blocks of FIGS. 9a and 9b or of FIG. 11 can construct only vertically straight walls in horizontally straight lines.

C. Differences between Dawson and Maguire Blocks and their Constructed Walls

In addition to differences between the Dawson and Maguire interlocking systems, there are important differences between their blocks and between walls constructed with these blocks.

Maguire's blocks 10 have one or more central holes 18 extending completely through the block 10 body, whose function is to "reduce the bulk and weight of the block" (FIGS. 1-6; col. 2, lines 48-51). Dawson's blocks 10 have a cavity 30 extending only to a bottom wall 32 and the cavity 30 accommodates plants or vegetation (FIGS. 1-11; col. 5, line 50 – col. 6, line 25).

Maguire's central hole 18 is positioned only at the narrow neck region of the block 10, and is covered in the constructed wall (FIGS. 3-4; col. 3, line 37 – col. 4, line 11). Dawson's cavity 30 extends from the narrow neck region on the block 10 toward the front face 20 of the block 10, and is exposed in the constructed wall to receive soil and plants (FIGS. 5-9a. 10a and 11; col. 3, line 52 – col. 4, line 29; col. 6, lines 3-63).

Maguire uses only his disclosed blocks 10 to construct a wall; Maguire does not teach how his blocks 10 may be used with other known blocks to construct a wall (FIG. 3; col. 2, lines 10-22; col. 3, line 37 – col. 4, line 11). Dawson may use his blocks 10 with "conventional non-plantable wall blocks" that have a pin-in-hole interlock (FIGS. 10a-10b; col. 7, lines 38-58). Dawson does not describe any conventional wall blocks with knobs that can be used with Dawson's blocks that have knobs.

D. Neither Reference Teaches Using Knob-and-Groove and Pin-in-Hole Together

No record reference teaches that these interlocks may be used on the same block or that blocks having these different interlocks can be used together to construct a wall. Maguire teaches that only his knob-and-groove blocks may be used to construct a wall; they cannot be used with any other blocks of other shape or interlock. Maguire never teaches that his knobs can fit in the pin receiving holes of his acknowledged prior art. Neither reference suggests that the Maguire knobs can fit in the Dawson pin-receiving holes to construct a wall. Dawson teaches that his pin-in-hole blocks may be used alone or with conventional pin-in-hole blocks to construct a wall. Dawson teaches that his blocks with knobs can only be used with each other to construct a wall. Dawson never teaches using his pin-in-hole blocks and his knob blocks together to construct a wall. Dawson never teaches a block with both pin-in-hole and knob interlock.

Accordingly, it is Applicants' position that (1) there is no suggestion to combine Maguire and Dawson and that (2) Maguire and Dawson teach away from each other and away from the presently claimed invention. There is no suggestion to combine these references because Maguire teaches knobs-and-grooves to be superior to pins-in-holes, while Dawson teaches them to be merely alternatives with no preference for either one. Maguire and Dawson teach away from each other and away from the claimed invention because of important differences in structure and function. Pertinent case law amply supports Applicant's position.

Discussion of Relevant Case Law

(1) There must be some suggestion to combine prior art teachings.

An invention is not obvious absent a suggestion to combine the prior art references. "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination." *In re Geiger*, 2 USPQ 2d 1276, 1278 (Fed. Cir. 1987). The remarks above emphasize that these references do not provide motivation for the combination the final rejection suggests. The only way the Examiner can conclude that these disparate references can be combined is by using the teachings of Applicants' own disclosure. The Federal Circuit is adamant in stating that this approach cannot support a rejection under 35 U.S.C. 103:

> It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In re Fritch, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992)(quoting *In re Fine* 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988).

As noted above, the present claims and Maguire require an opening extending through the entire block to form a vertical channel in the constructed wall to hold reinforcing members. Dawson's blocks must have a bottom wall to retain soil and vegetation. The opening required by the present claims and by Maguire would render Dawson's blocks inoperable for the intended purpose of providing a plantable wall.

As also noted above, Maguire describes blocks with knobs-and-grooves that engage to form a convex or concave curved wall (col. 3, lines 49-55) or a circular wall (col. 4, lines 7-11). Dawson describes only two alternative knobs (FIGS. 9a, 9b and FIG. 11), which construct only horizontally straight walls. Placing the Dawson knobs on the Maguire blocks would render Maguire inoperable for the intended purpose of providing walls of various curvatures.

In a footnote in *Fritch*, the Federal Circuit criticized the Examiner and the Board for suggesting "a proposed modification inappropriate for an obviousness inquiry when the modification rendered the prior art reference inoperable for its intended purpose." *Fritch*, at 1783, fn. 12. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *Id.*, (citing *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

(2) References teaching away from each other do not suggest a claimed invention.

Gurley states that a reference may be said to teach away from the claimed invention when "a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *Id.*, 31 USPQ 2d at 1131. Here, a skilled artisan faces two different teachings of interlocking blocks. Except that each reference concerns interlocking blocks, the reference teachings diverge from each other and do not suggest the claimed invention.

A reference teaches away if it suggests that a line of development flowing from the references' disclosures is unlikely to produce the result sought by the applicant. *United States v. Adams*, 148 USPQ 479, 484 (CCPA 1966) ("known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness").

CONCLUSION

The present claims are patentable over the prior art of record. Withdrawal of this ground of rejection and passage of this case to issue is requested.

If any additional fees are due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 16-2312. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our deposit account.

Respectfully submitted,

Date: 12/8/03

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